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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,803	10/15/2003	Jason Gilmore	66347-096	1690

7590 05/03/2004

DYKEMA GOSSETT PLLC  
Third Floor West  
1300 I Street, N.W.  
Washington, DC 20005

EXAMINER

BOCHNA, DAVID

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 05/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/684,803		GILMORE, JASON	
	<b>Examiner</b>		<b>Art Unit</b>	
	David E. Bochna		3679	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 4, 6 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Fox et al.

In regard to claim 1, Fox et al. discloses a flexible coupling for a ducting system, the coupling comprising:

a first member 18 including a first engaging member 46, the first member defining a receiving portion;

a second member 16 including a second engaging member 44, the second member, in use, engaging with the receiving portion such that the first and second members can be retained together by the first and second engaging surfaces to define a retaining cavity of substantially spherical curvature;

a seal 22 arranged, in use, to seal the gap between the first and second members',  
a third member 42 retained, in use, in the retaining cavity such that it is rotatable in any of the three rotational degrees of freedom with the cavity around a point offset in the direction opposite to the insertion direction of the third member from a plane defined by the engaging surfaces of the first and second members; and

a first load bearing member 45 positioned between the second 16 and third 42 members such that, in use, the load bearing member provides a load bearing surface in engagement with the surface of the second member.

Art Unit: 3679

In regard to claim 2, further comprising a second load bearing member 47 positioned between the first 18 and third 42 members such that, in use, the load bearing member provides a load bearing surface in engagement with the surface of the first member.

In regard to claim 4, the engaging members 44, 46 are flanges.

In regard to claim 6, the first and third members are each integrally connected to a piece of tubing (42 is attached to 14 and 18 is attached to tubular portion 30).

In regard to claim 8, wherein the third member 42 is shaped so that it always covers the load bearing surface (of 16).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fox et al. in view of Leake. Fox et al. discloses a flexible coupling as described above, and also discloses making the bearings out of an anitfrictional material, but does not specifically disclose that the seal and load bearing surfaces are made from carbon. Leake et al. teaches that graphite is a suitable material for reducing friction in the ball and socket joint. Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the seal and bearing to include graphite, as taught by Leake, because graphite is an effective material in reducing friction in a ball and socket joint.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fox et al. in view of Contreras et al. Fox et al. discloses a flexible coupling as described above, but does not

Art Unit: 3679

disclose that a single clamp clamps around the first and second flanges. Contreras et al. demonstrates that using one clamp to clamp around flanges of a ball and socket coupling is common and well known in the art. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the clamps (bolts) of Fox et al. to include a single clamp, because using a band clamp is common and well known in the art, as demonstrated by Contreras et al.


***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kuo, Dryer, Arnold, Mancusi, Jr., Daniel, Woodruff, Christenson, Bard, Cooper, Kelly et al., Heygate and UK Application '352 all disclose similar couplings common in the art.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Bochna whose telephone number is (703) 306-9040. The examiner can normally be reached on 8-5:30 Monday-Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (703) 308-2686. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2168.



**David Bochna  
Primary Examiner  
Art Unit 3679  
April 29, 2004**